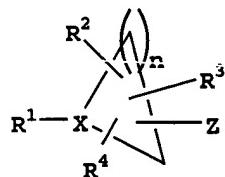


CLAIM AMENDMENTSIn the Claims

Claim 1. (Currently Amended) A compound having the structure



wherein n is 4;

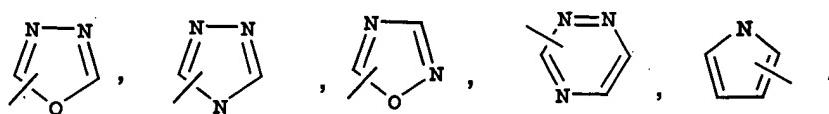
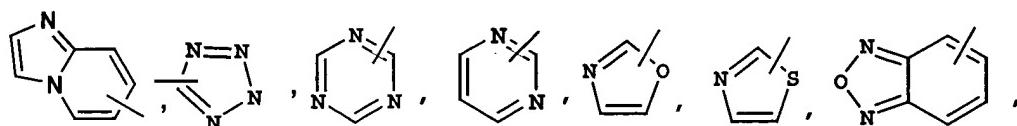
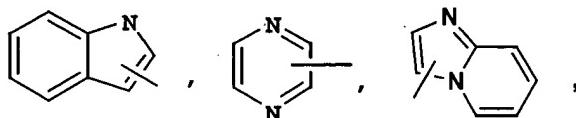
X is N;

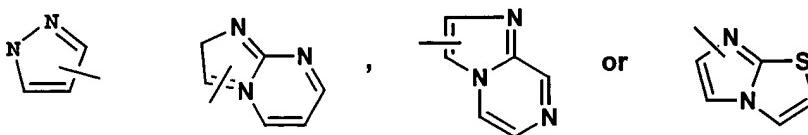
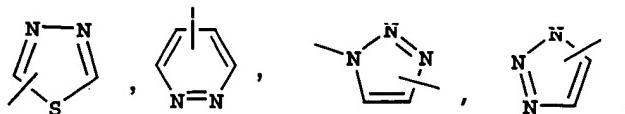
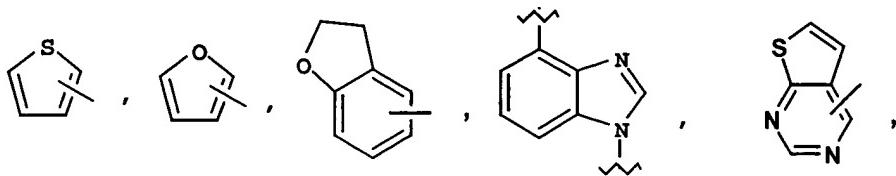
Z is a 5- or 6-membered nitrogen-containing monocyclic heteroaryl group which is selected from the group consisting of imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino-(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, aminothiazole, aminooxazole, aminooxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxy carbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine;

R<sup>1</sup> is heteroaryl,

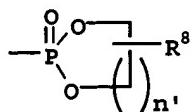
and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents;

and wherein the R<sup>1</sup> heteroaryl group is selected from

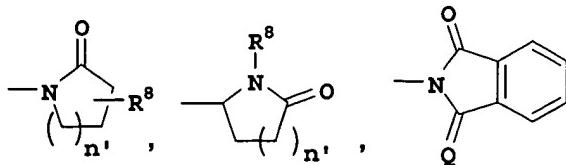




R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxy carbonylamino, 1,1-(alkoxyl or aryloxy)alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,



pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

Including or a pharmaceutically acceptable salts salt thereof, or a prodrug prodrugs thereof, and all stereoisomers thereof.

Claim 2. (Currently Amended) The compound as defined in Claim 1 75 wherein Z is a heteroaryl group containing 1 to 4 heteroatoms, at least one of which is a nitrogen atom, the heteroaryl group being attached to the rest of the molecule via an available nitrogen or carbon atom.

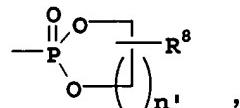
Claim 3. (Original) The compound as defined in Claim 1 wherein at least one of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> is aryl or heteroaryl.

Claims 4-7. (Cancelled).

Claim 8. (Previously Presented) The compound as defined in Claim 1 wherein the R<sup>1</sup> group may be substituted within from one to five of the following groups:

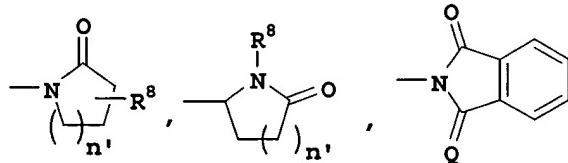
alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl,

halogen, haloalkyl, polyhaloalkyl, such as CF<sub>3</sub> and CF<sub>3</sub>CH<sub>2</sub>, polyhaloalkyloxy, such as CF<sub>3</sub>O and CF<sub>3</sub>CH<sub>2</sub>O, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylamino carbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, 1,1-(alkoxyl or aryloxy)alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring, such as 1,3-dioxane or 1,3-dioxolane), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl,



NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl,

NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino, pyridine-N-oxide,



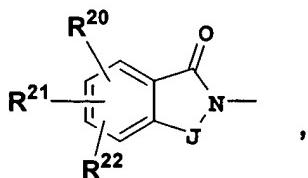
(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or  $\text{NR}^8\text{R}^9-\text{C}(=\text{O})-\text{C}-\text{R}^{8a}$ ; tetrazolyl, pyrazolyl, pyridyl,

thiazolyl, pyrimidinyl, imidazole, oxazole or triazole; -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy);

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl or cycloheteroalkyl, which substituents may be the same or different from each other and may be the same or different from the base R<sup>1</sup> group.

**Claim 9. (Original)** The compound as defined in Claim 1 wherein R<sup>1</sup> is substituted with one to five of the following substituents: alkyl, alkylaminocarbonyl, arylaminocarbonyl, heteroarylamino carbonyl, alkylcarbonylamino, heteroaryl, halo, aryl, cycloalkylcarbonylamino,

arylcarbonylamino, heteroarylcarbonylamino, alkoxy carbonylamino, guanidinyl, nitro, cycloheteroalkyl, aryloxycarbonylamino, heteroaryloxy carbonylamino, uriedo (where the uriedo nitrogens may be substituted with alkyl, aryl or heteroaryl), heterocyclcarbonylamino (where the heterocycle is connected to the carbonyl group via a nitrogen or carbon atom), alkylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino,



Where J is :  $\text{CHR}^{23}$ ,  $-\text{C}(=\text{O})-$ ,  $-\text{CH}-\text{CH}-$  or  $-\text{C}(\text{R}^{24})-\text{C}(\text{R}^{25})-$  ;

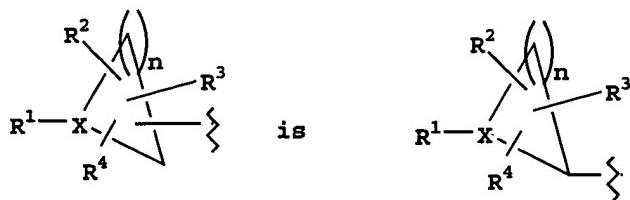
R<sup>23</sup>, R<sup>24</sup> and R<sup>25</sup> are independently hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, cycloalkyl, or cycloalkylalkyl;

(61) R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup> are independently hydrogen, halo, alkyl, alkenyl, alkoxy, aryloxy, aryl, arylalkyl, alkylmercapto, arylmercapto, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, hydroxy or haloalkyl; and these preferred substituents may either be directly attached to R<sup>1</sup>, or attached via an alkylene chain at an open position, which substituents may be the same or different from each other and may be the same or different from the base R<sup>1</sup> group.

Claim 10. (Original) The compound as defined in Claim 1 wherein Z is imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino(alkyl)imidazole or (acetylamino)imidazole.

Claims 11-13. (Cancelled).

Claim 14. (Original) The compound as defined in Claim 1 wherein the moiety



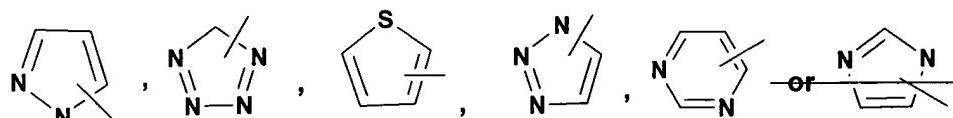
Claim 15. (Original) The compound as defined in Claim 1 wherein R<sup>2</sup> and R<sup>3</sup> are independently H, lower alkyl, lower alkoxy or aryl, and R<sup>4</sup> and R<sup>5</sup> are each hydrogen.

Claim 16. (Cancelled).

Claim 17. (Previously Presented) The compound as defined in Claim 1 wherein n is 4, R<sup>2</sup> and R<sup>3</sup> are independently H or lower alkyl, and R<sup>4</sup> and R<sup>5</sup> are each H, and R<sup>1</sup> is aryl or heteroaryl.

Claim 18. (Cancelled).

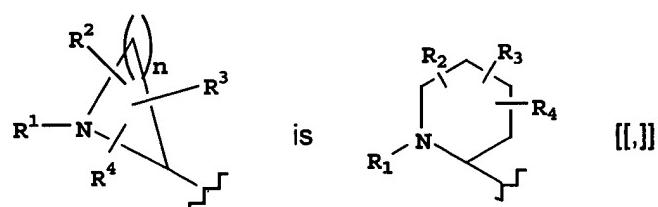
Claim 19. (Currently Amended) The compound as defined in Claim 1 wherein R<sup>1</sup> is

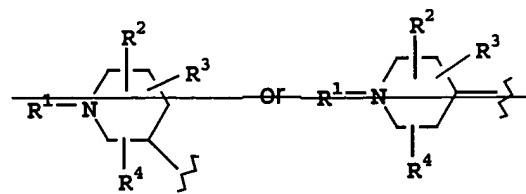


Claim 20. (Original) The compound as defined in Claim 1 wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and/or R<sup>4</sup> may be joined together with the N atom and/or carbons to which they are attached to form a non-aromatic ring.

Claim 21. (Cancelled).

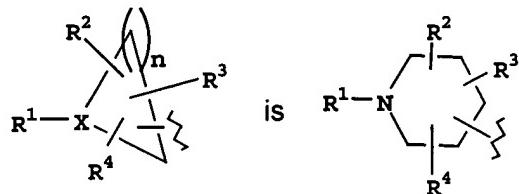
Claim 22. (Currently Amended) The compound as defined in Claim 14 wherein



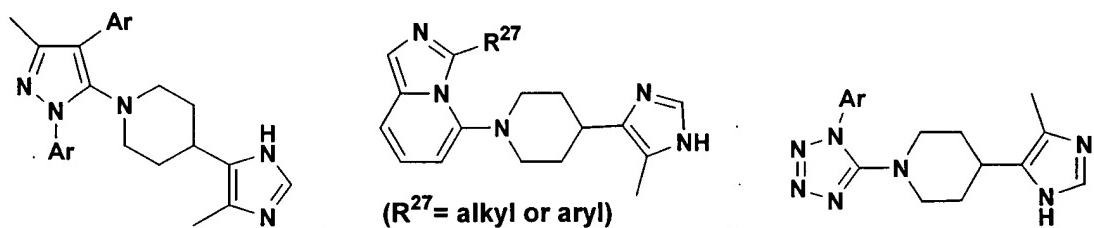
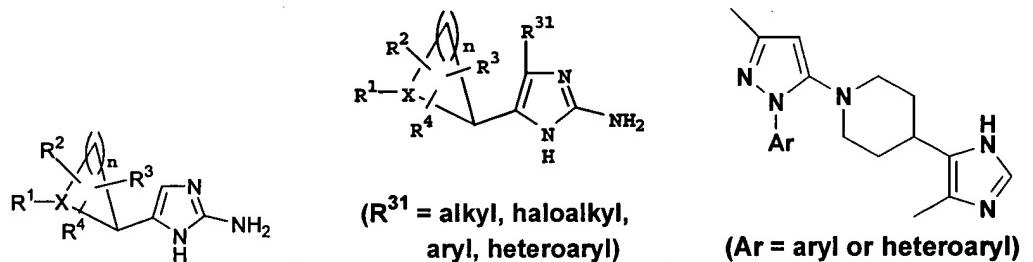


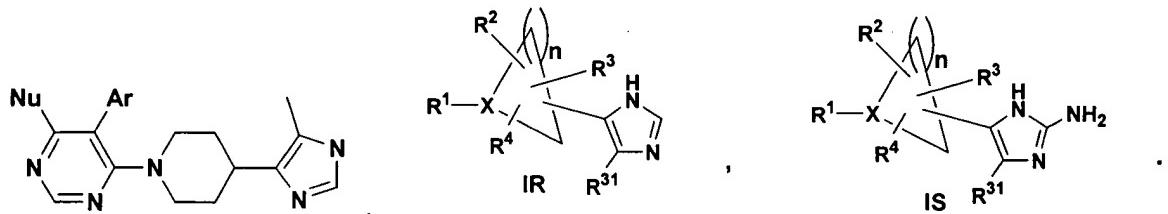
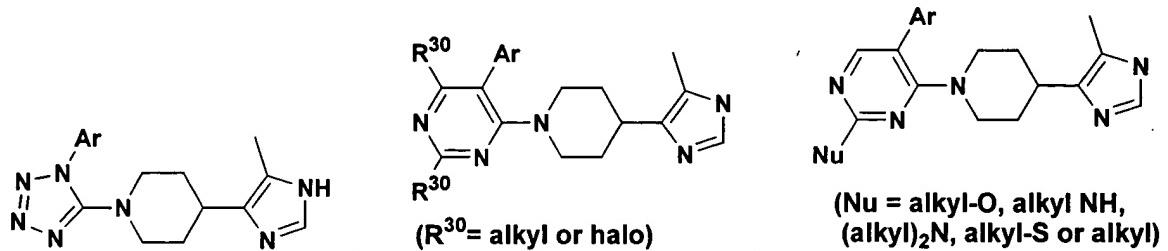
Claim 23. (Cancelled).

Claim 24. (Currently Amended) The compound as defined in Claim [[14]] 1 wherein

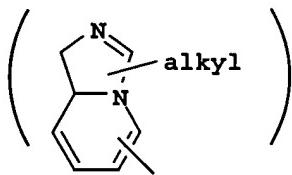


Claim 25. (Previously Presented) The compound as defined in Claim 1 having the structure





Claim 26. (Previously Presented) The compound as defined in Claim 1 wherein R<sup>1</sup> is phenyltetrazole, 1-(2,4-dihalo-5-alkoxyphenyltetrazol-5-yl, alkylphenyltetrazole, halophenyltetrazole, 1-(2-alkoxy-5-halophenyl)tetrazol-5-yl, 1-(3-alkyl-4-halophenyl)tetrazol-5-yl, alkoxyphenyltetrazole, alkyl(halo)phenyltetrazole, alkoxy(halo)phenyltetrazole, alkoxy(alkyl)(halo)phenyltetrazole, phenylalkyl-pyrazole, alkoxyphenyl-alkyl-pyrazole, halophenyl-alkyl-pyrazole, alkyl(halo)phenyl-alkyl-pyrazole, alkylphenyl-alkyl-pyrazole, alkoxy(halo)phenyl-alkyl-pyrazole, alkoxy(alkyl)phenyl-alkyl-pyrazole, dihalophenyl-alkyl-pyrazole, dialkylphenyl-alkyl-pyrazole, alkoxyphenyl-alkyl-pyrazole, halophenyl-haloalkyl-pyrazole, alkoxyphenyl(alkyl)(halo)pyrazole, phenylpyrimidine, phenyl(halo)pyrimidine, diphenylpyrimidine, halophenyl(halo)pyrimidine, dihalopyrimidine, diphenyl(halo)pyrimidine, halo(phenyl)pyrimidine, dialkyl(halo)pyrimidine, dihalophenylpyrimidine, alkylphenylpyrimidine, alkoxyphenylpyrimidine, alkylphenyl(alkoxy)pyrimidine, dialkylphenyl(alkoxy)pyrimidine, alkyl(halo)phenyl(alkoxy)pyrimidine, alkoxy(halo)phenyl(alkoxy)pyrimidine, dihalophenyl(dialkylamino)pyrimidine, heteroaryl(dihalophenyl)pyrimidine, halophenylpyrimidine, alkoxy(phenyl)pyrimidine, haloalkoxyphenylpyrimidine, phenoxy(phenyl)pyrimidine, heteroaryl(phenyl)pyrimidine, dialkoxyphenylpyrimidine, dialkylphenylpyrimidine, cycloheteroalkyl(phenyl)pyrimidine, alkoxy(halo)phenylpyrimidine, cycloheteroalkyl(dihalophenyl)pyrimidine, halophenyl(alkoxy)pyrimidine, alkyl(halo)phenylpyrimidine, nitrophenylpyrimidine, dihalophenyl(alkoxy)pyrimidine, carboxyphenylpyrimidine, alkylcarbonylphenylpyrimidine, naphthylpyrimidine, alkylthiophenylpyrimidine, alkyl(halophenyl)triazole, alkyl(halo)phenyl-(alkyl)-triazole, alkylimidazopyridine



phenylimidazopyridine, halophenylimidazopyridine, dihalophenylimidazopyridine,  
alkoxyphenylimidazopyridine.

Claim 27. (Previously Presented) The compound as defined in Claim 1 wherein

$R^2$  is  $CH_3$  or H;

$R^3$  is  $CH_3$  or H;

$R^4$  is H;

$R^1$  is 2,3-dihydrobenzofuran-4-yl, 1-phenyltetrazol-5-yl,

1-(2,4-dichloro-5-methoxyphenyl)tetrazol-5-yl,

1-(3-chlorophenyl)tetrazol-5-yl,

1-(3-chloro-4-methyl)tetrazol-5-yl,

1-(3-methylphenyl)tetrazol-5-yl,

1-(2-chlorophenyl)tetrazol-5-yl,

1-(2-methoxy-5-chloro)tetrazol-5-yl,

1-(3-methyl-4-chlorophenyl)tetrazol-5-yl,

1-(2-methoxy-5-chlorophenyl)tetrazol-5-yl,

1-(3-methoxyphenyl)tetrazol-5-yl,

1-(2-methoxy-5-chlorophenyl)tetrazol-5-yl,

1-(3-chlorophenyl)-3-methylpyrazol-5-yl,

1-(3-fluorophenyl)-3-methylpyrazol-5-yl,

1-(3-methoxyphenyl)-3-methylpyrazol-5-yl,

1-(3,5-dichlorophenyl)-3-methylpyrazol-5-yl,

1-(3-chlorophenyl)-3-ethylpyrazol-5-yl,

1-(3-chloro-4-methylphenyl)-3-methylpyrazol-5-yl,

1-(2,4-dimethylphenyl)-3-methylpyrazol-5-yl,

1-(3-chloro-4-fluorophenyl)-3-methylpyrazol-5-yl,

1-(3-trifluoromethylphenyl)-3-methylpyrazol-5-yl,

1-(3-chlorophenyl)-3-trifluoromethylpyrazol-5-yl,

1-(3-methylphenyl)-3-methylpyrazol-5-yl,

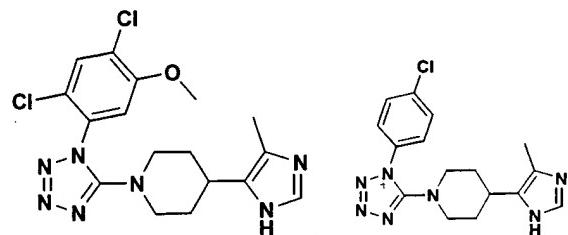
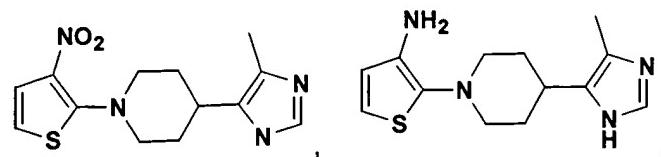
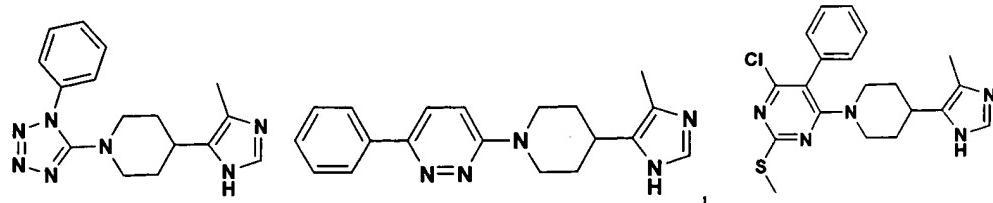
1-(3-chlorophenyl)-3-ethylpyrazol-5-yl,

5-(3-chloro-4-fluorophenyl)pyrimidin-4-yl,

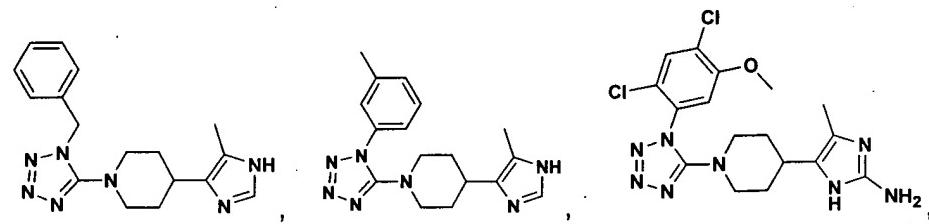
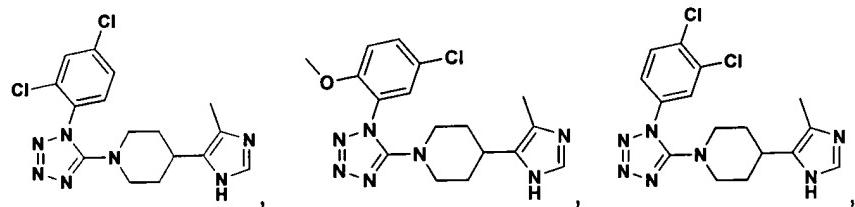
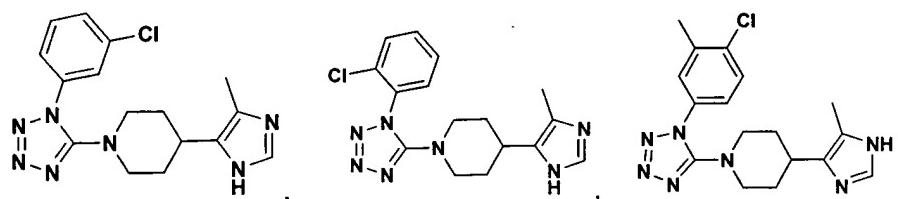
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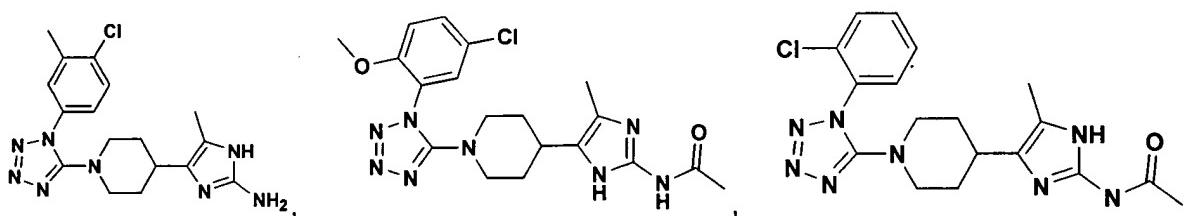
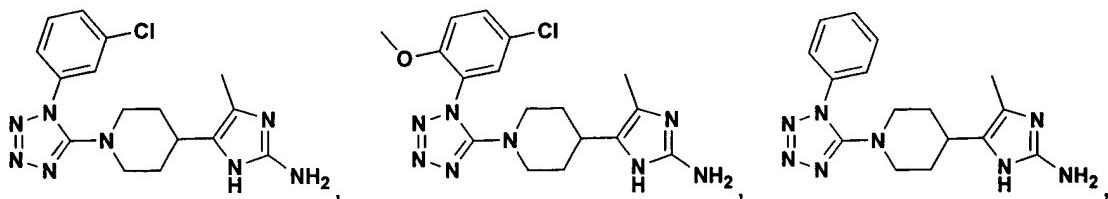
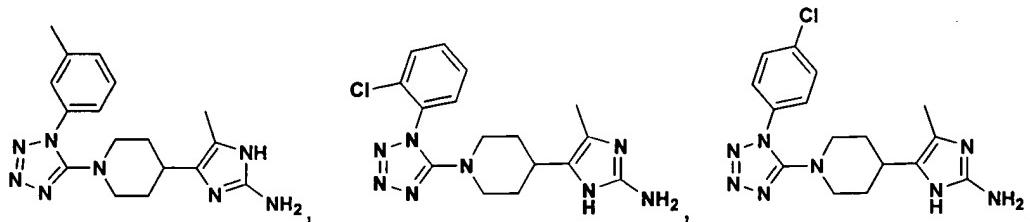
5-(2-chlorophenyl)pyrimidin-4-yl,  
5-(3-methylphenyl)pyrimidin-4-yl,  
5-(3-trifluoromethylphenyl)pyrimidin-4-yl,  
5-(2,4-dichlorophenyl)pyrimidin-4-yl,  
5-(2,5-dimethylphenyl)pyrimidin-4-yl,  
5-(3,4-dichlorophenyl)pyrimidin-4-yl,  
5-(2,3-dimethylphenyl)pyrimidin-4-yl,  
5-(2-methoxy-5-chlorophenyl)pyrimidin-4-yl,  
5-(2-methoxy-5-fluorophenyl)pyrimidin-4-yl,  
5-(3-methyl-4-fluorophenyl)pyrimidin-4-yl,  
5-(3-chloro-4-fluorophenyl)-2-methoxy-pyrimidin-4-yl,  
5-(3-chloro-4-fluorophenyl)-2-dimethylamino-pyrimidin-4-yl,  
5-(3-chloro-4-fluorophenyl)-2-morpholinyl-pyrimidin-4-yl,  
1-(3-chlorophenyl)-3-methyltriazol-5-yl,  
1-(3-chloro-4-methylphenyl)-3-methyltriazol-5-yl,  
5-(2,5-dichlorophenyl)pyrimidin-4-yl,  
5-(3-chlorophenyl)pyrimidin-4-yl,  
5-(3-trifluoromethoxyphenyl)pyrimidin-4-yl,  
5-(2-chlorophenyl)-2-methoxypyrimidin-4-yl,  
5-(3-chlorophenyl)-2-methoxypyrimidin-4-yl,  
5-(3-trifluoromethylphenyl)-2-methoxypyrimidin-4-yl,  
5-(2,4-dichlorophenyl)-2-methoxypyrimidin-4-yl,  
5-(3-methylphenyl)-2-methoxypyrimidin-4-yl,  
5-(2,5-dimethylphenyl)-2-methoxypyrimidin-4-yl, or  
5-(3-methyl-4-fluorophenyl)-2-methoxypyrimidin-4-yl;  
Z is 2-amino-5-methyl-imidazol-4-yl, 2,5-dimethylimidazol-4-yl, 2-amino-5-ethyl-imidazol-4-yl, 2-amino-5-isopropyl-imidazol-4-yl, 2-aminocarbonylamino-5-methyl-imidazol-4-yl, 5-methyl-imidazol-4-yl, imidazol-4-yl, or 4-methylimidazol-5-yl.

Claim 28. (Previously Presented) A compound having the structure

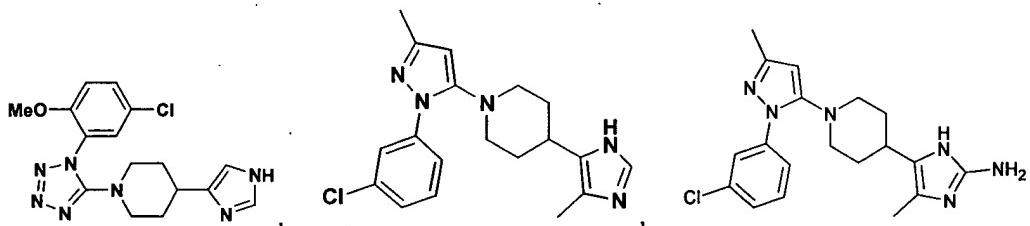
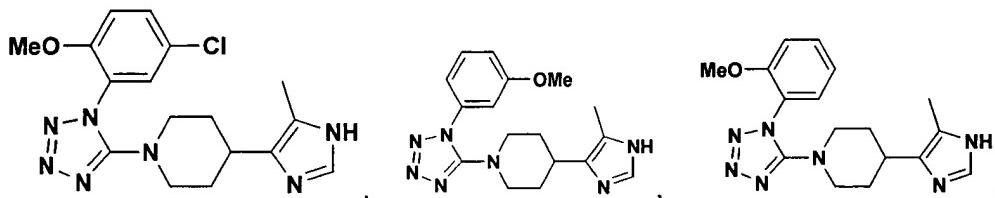
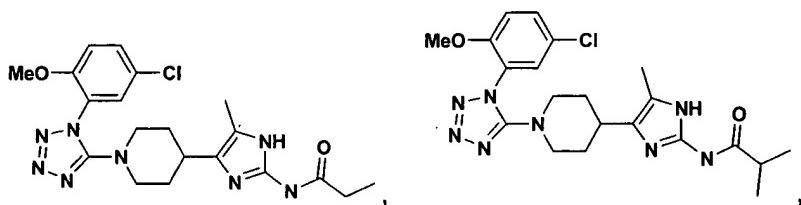


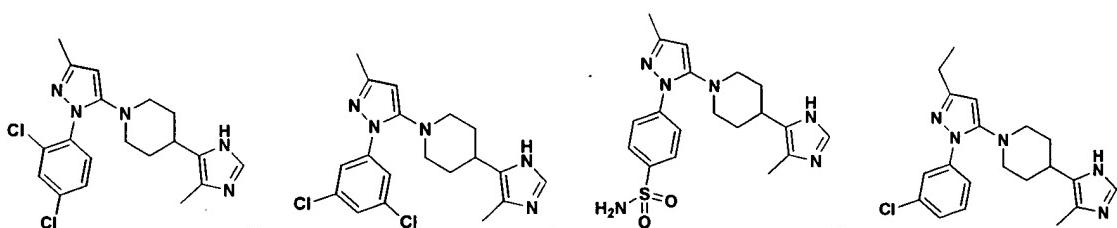
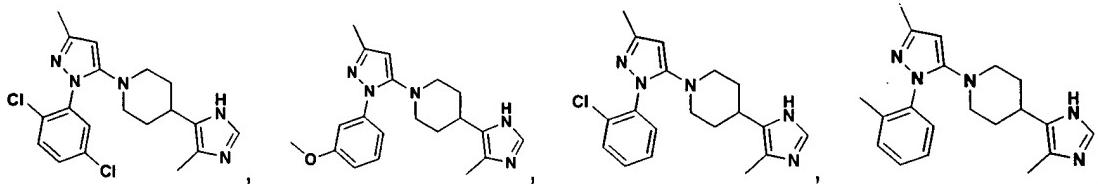
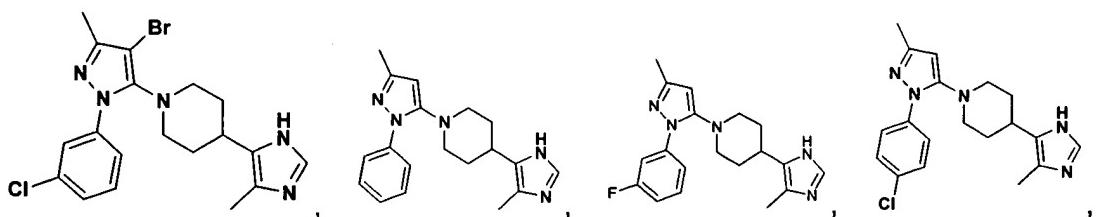
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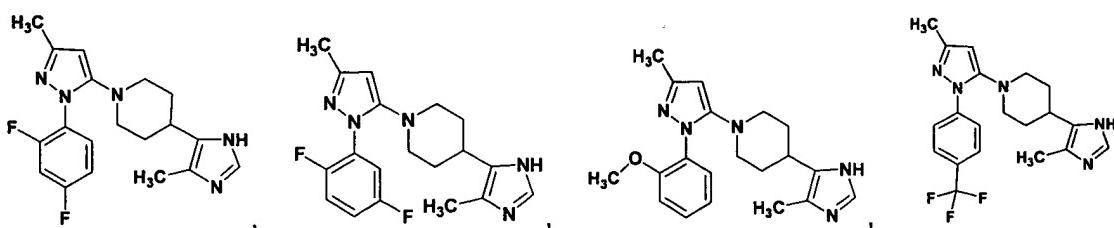
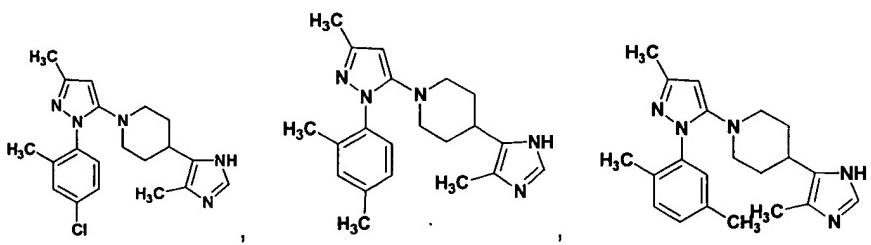
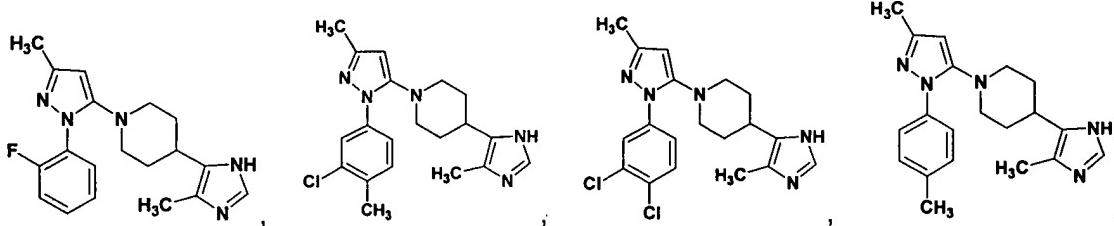


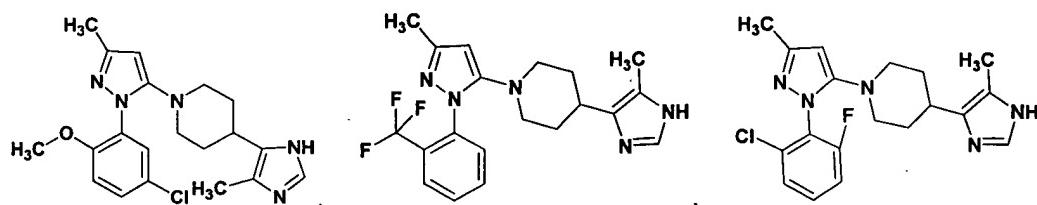
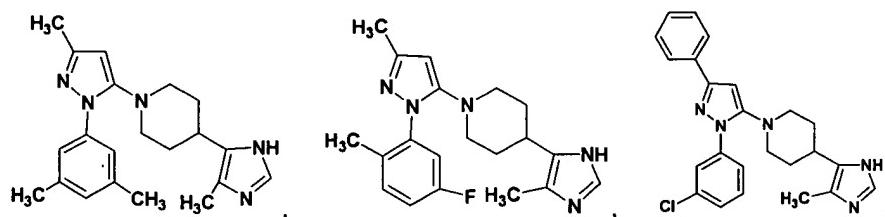
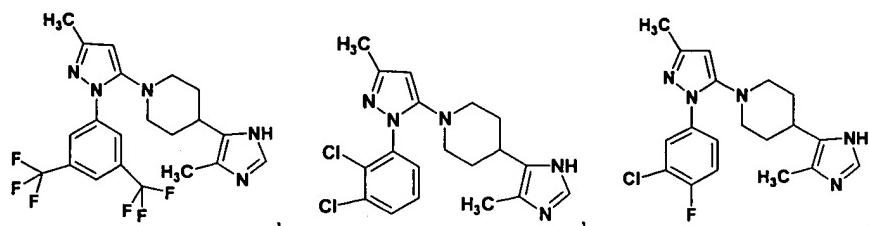
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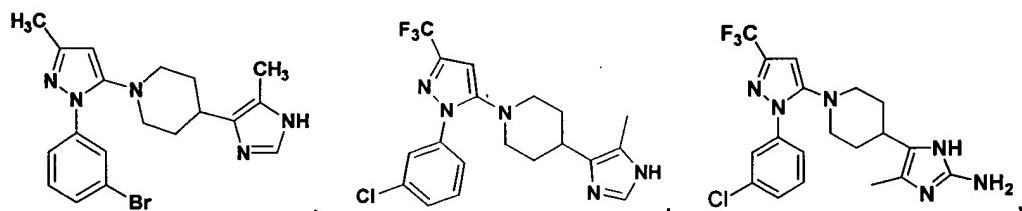
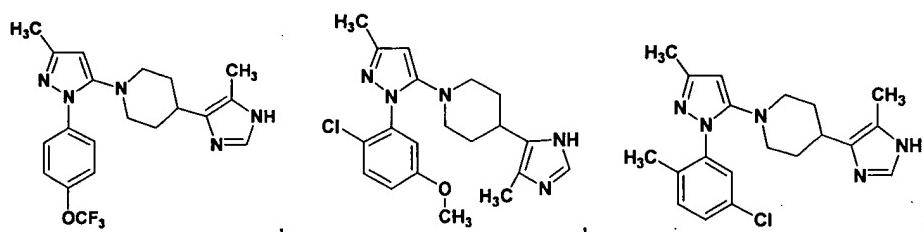
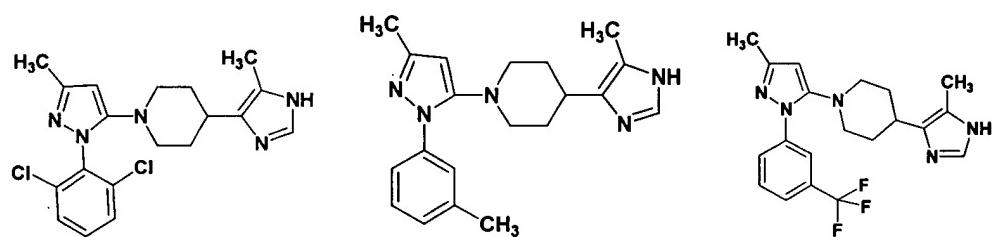


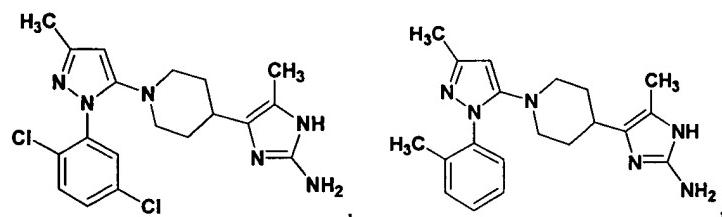
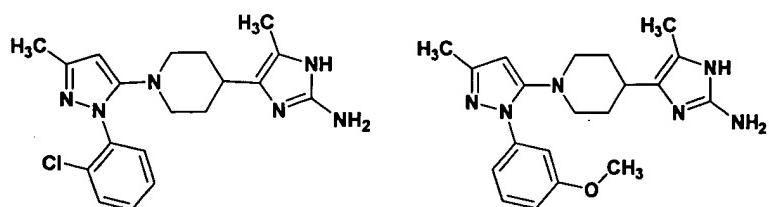
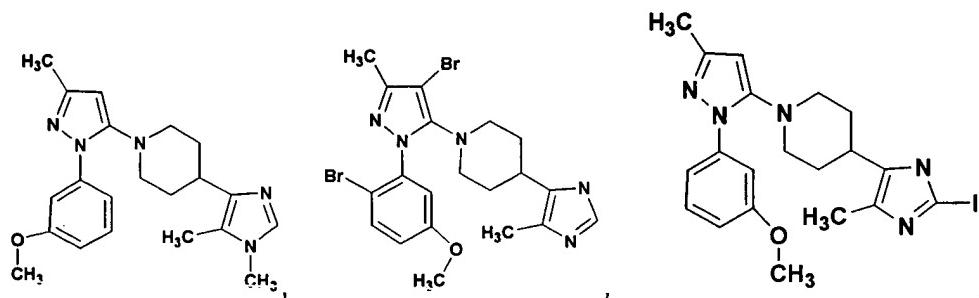
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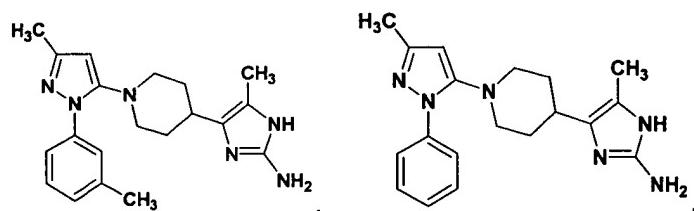
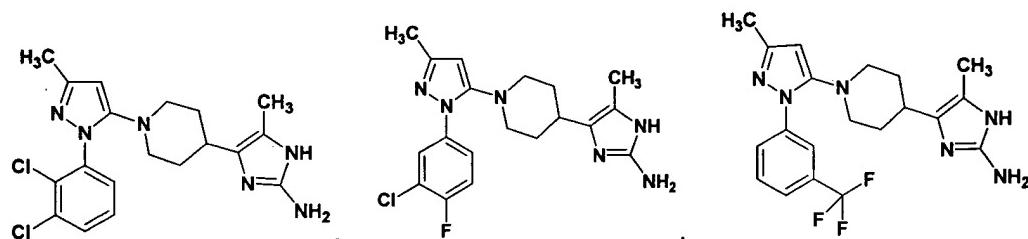
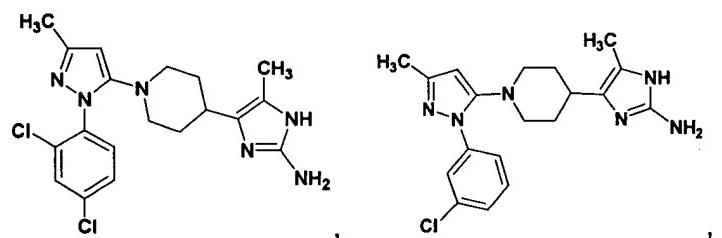


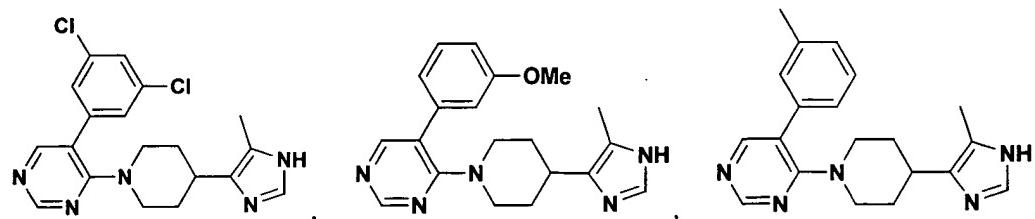
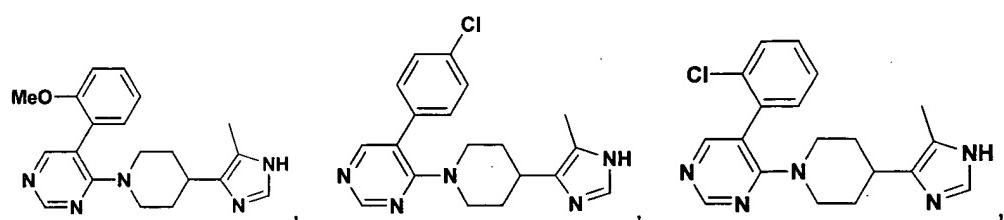
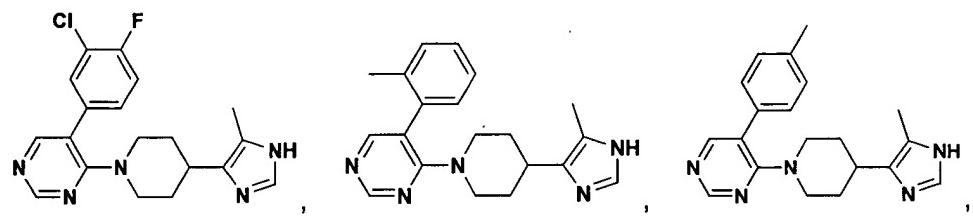
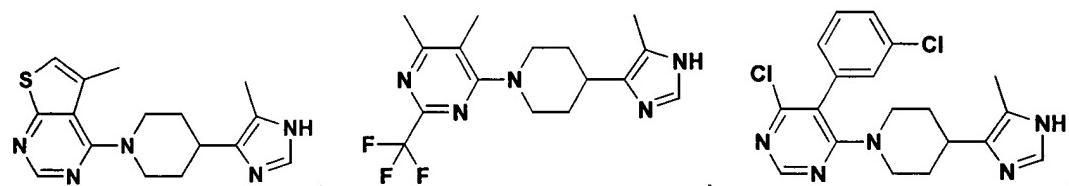
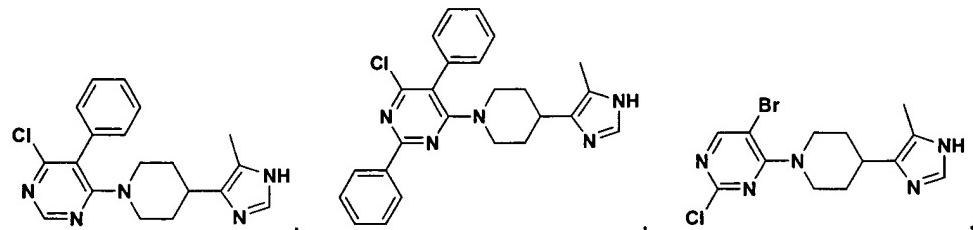
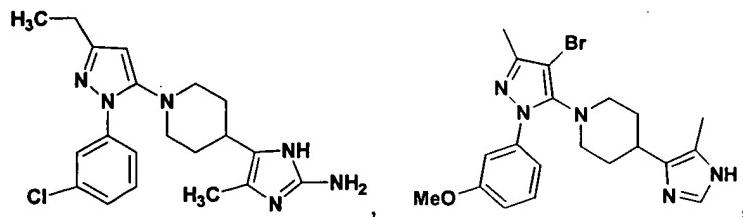
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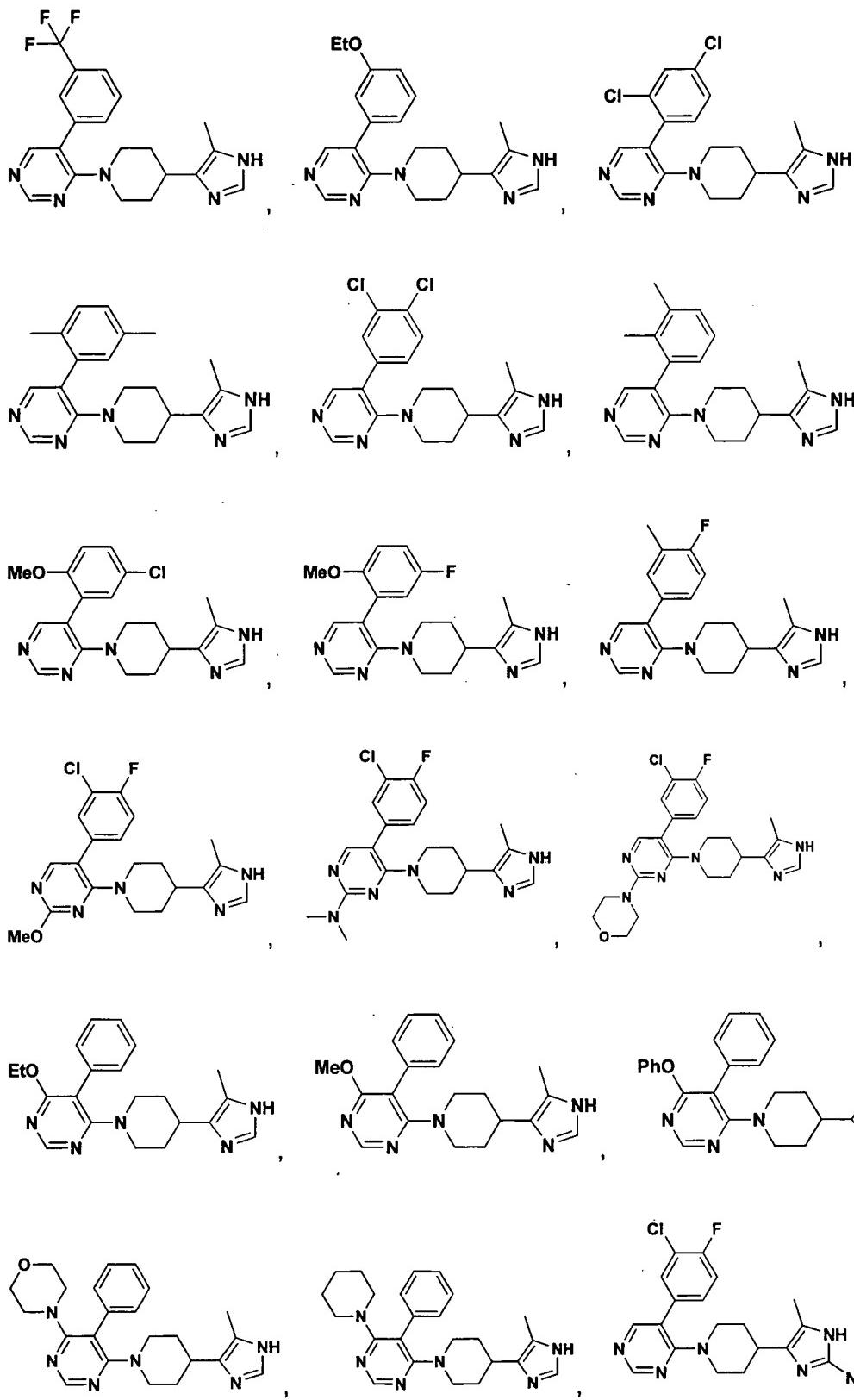


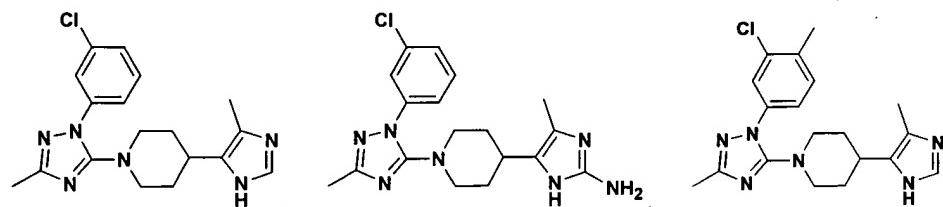
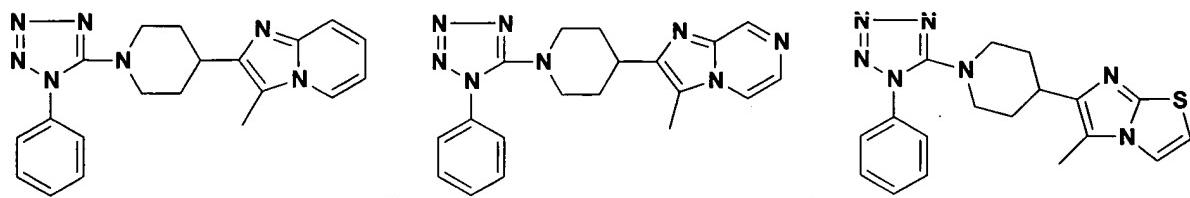
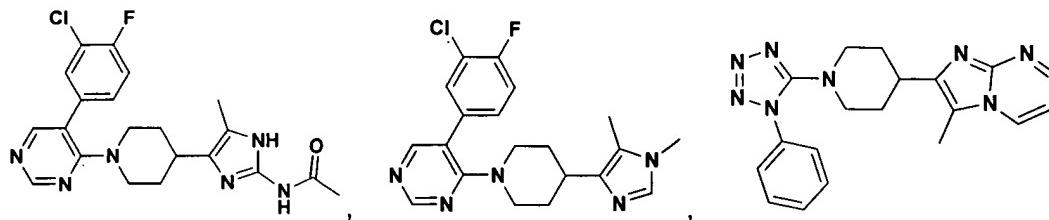


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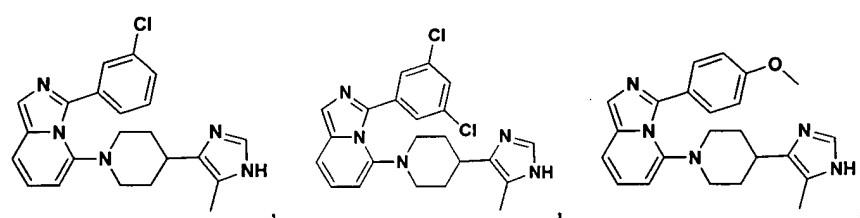
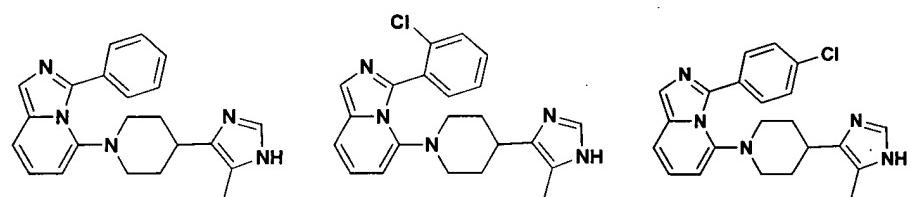
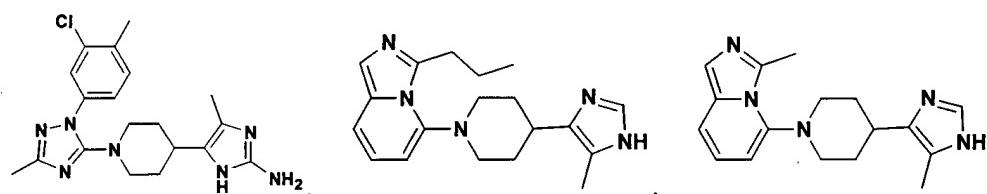


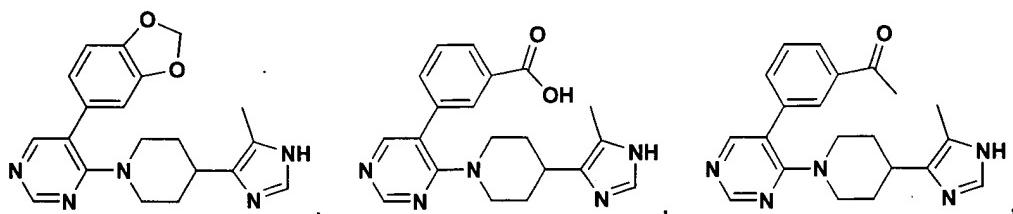
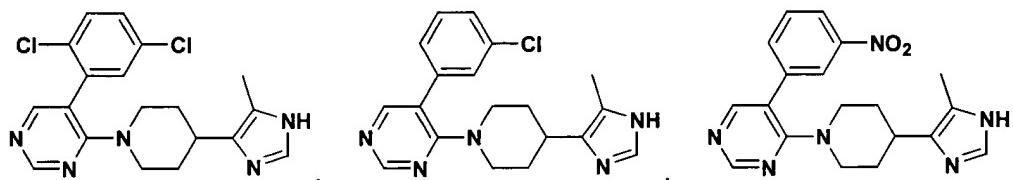
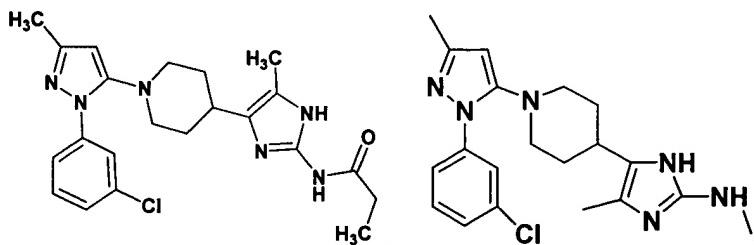
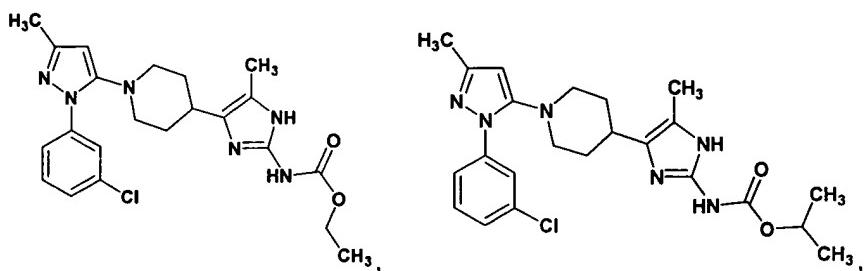
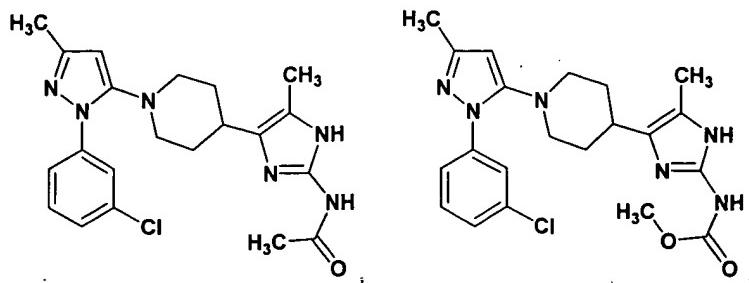


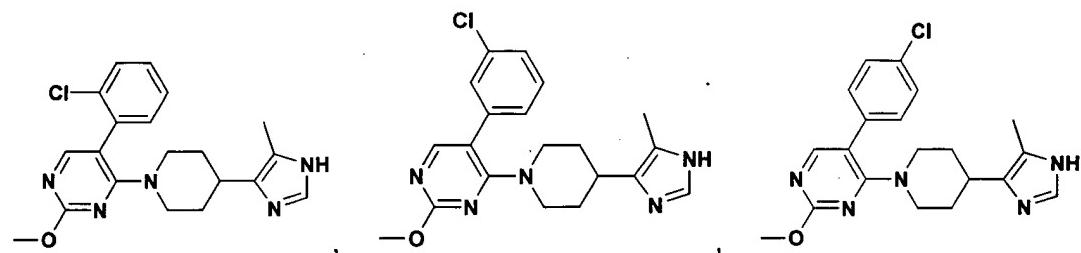
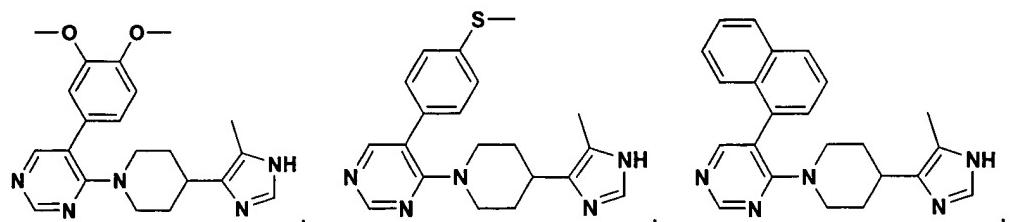
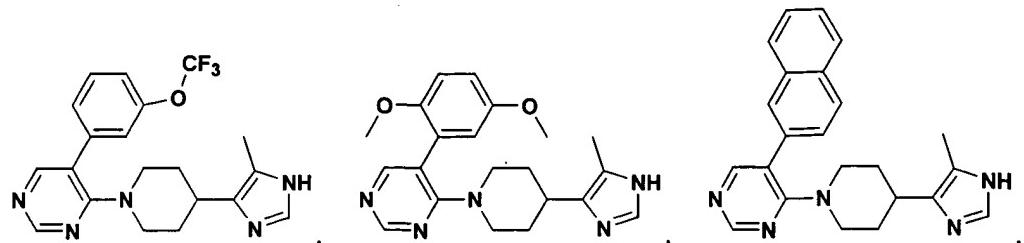




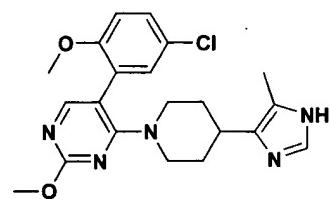
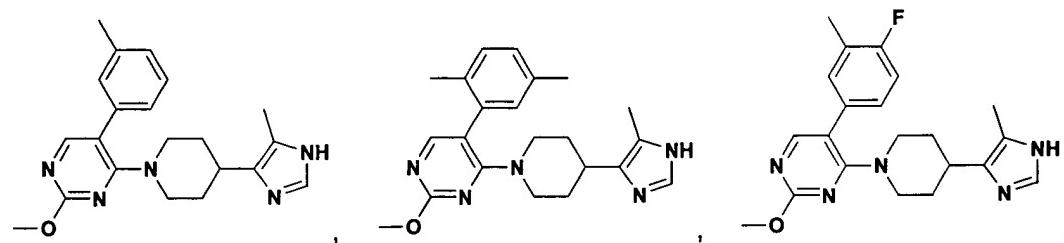
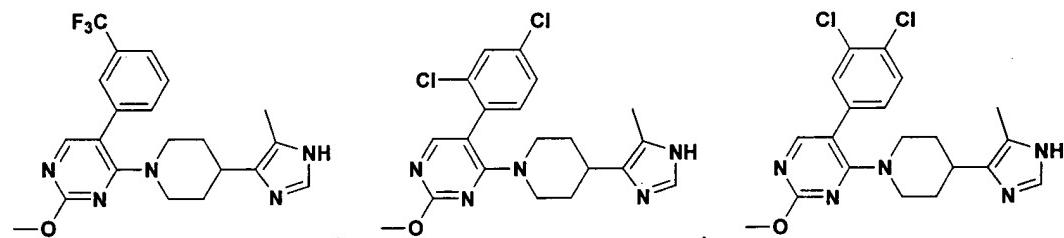
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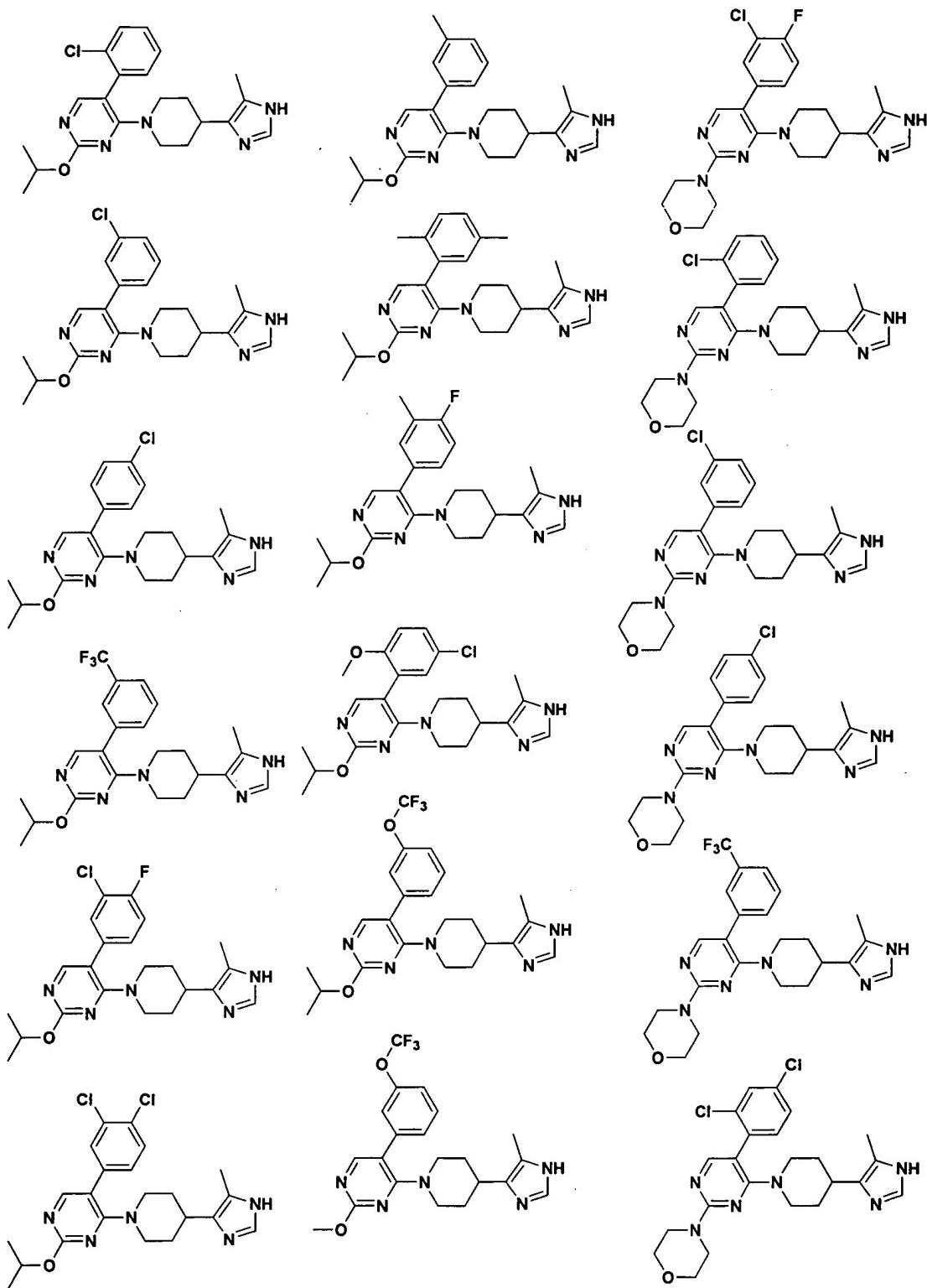


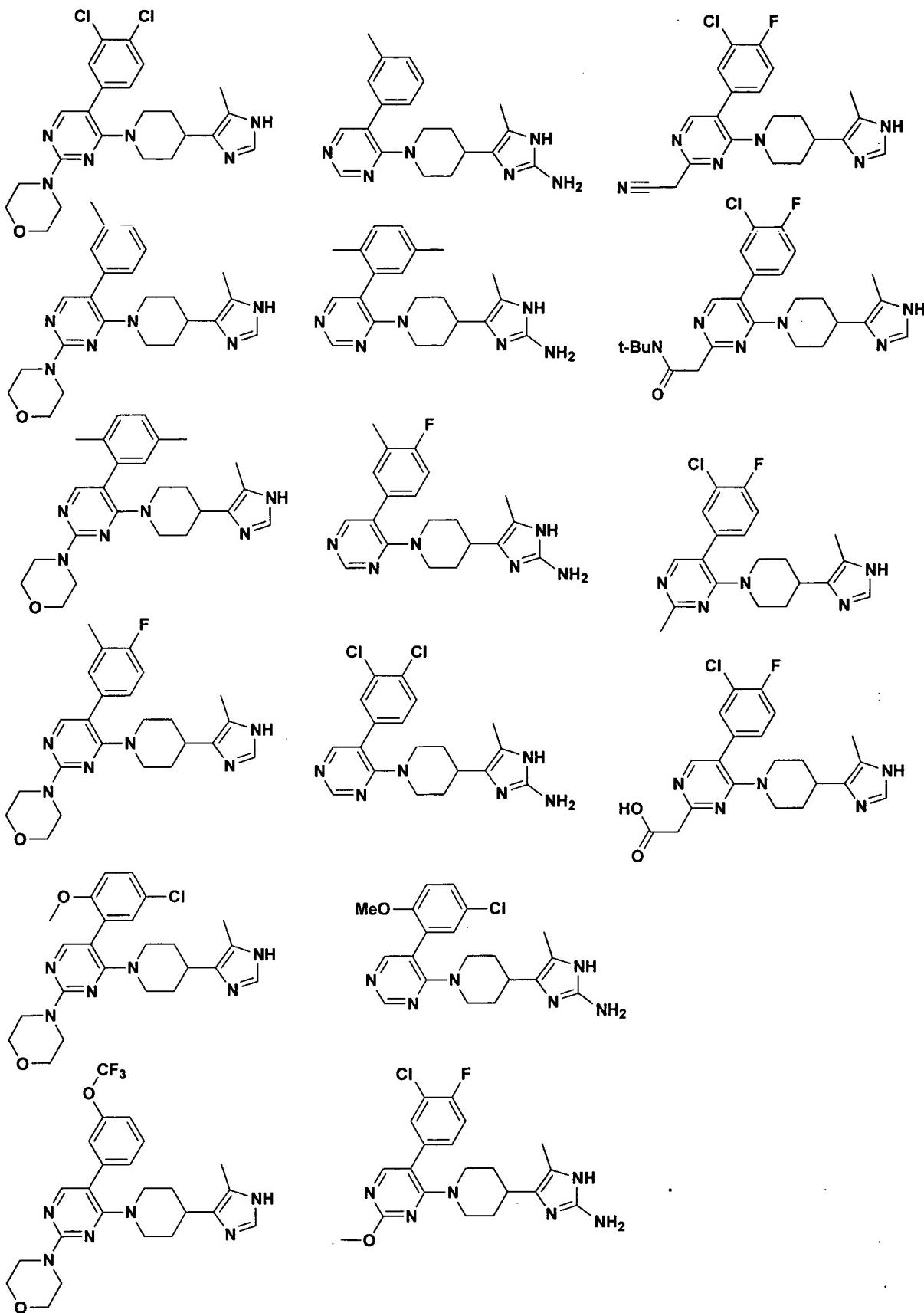




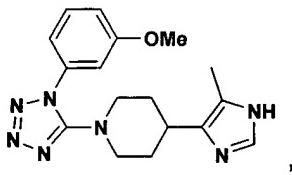
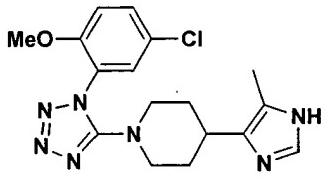
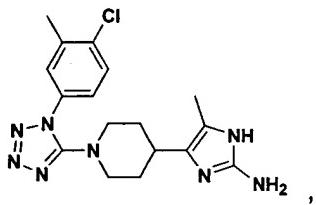
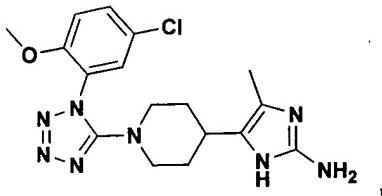
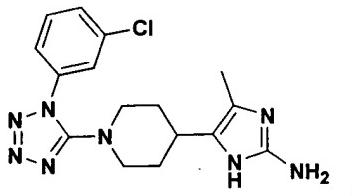
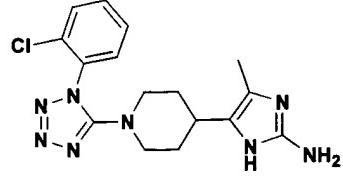
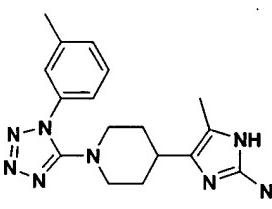
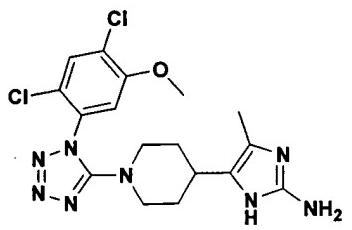
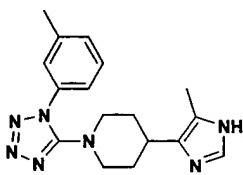
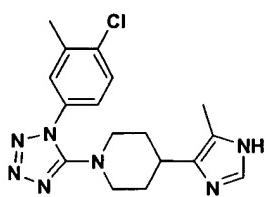
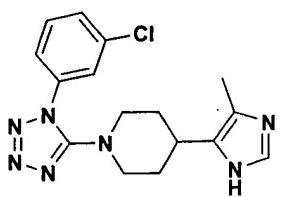
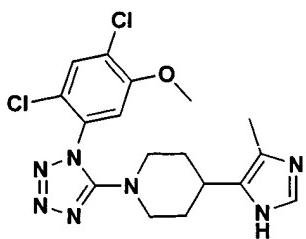
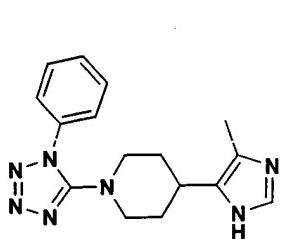
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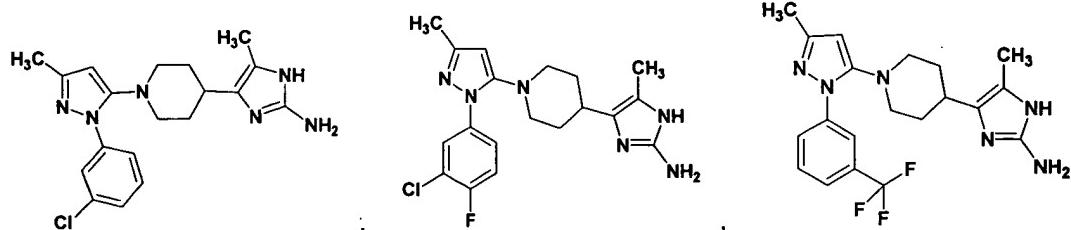
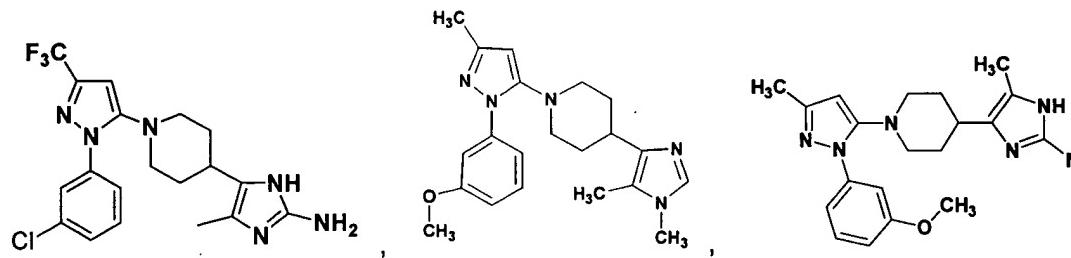
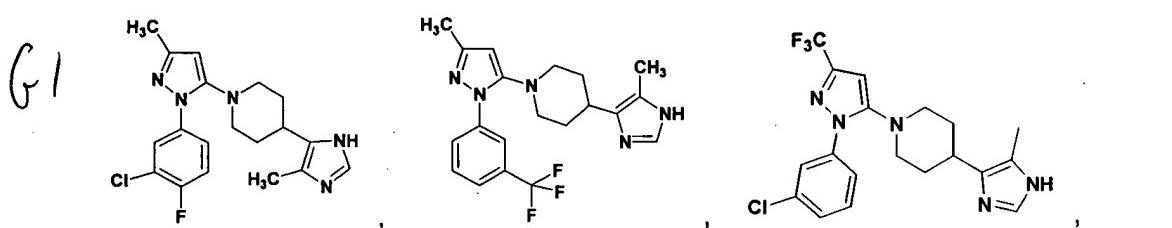
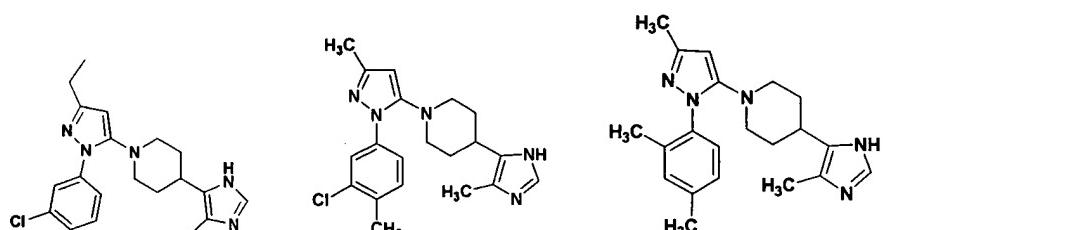
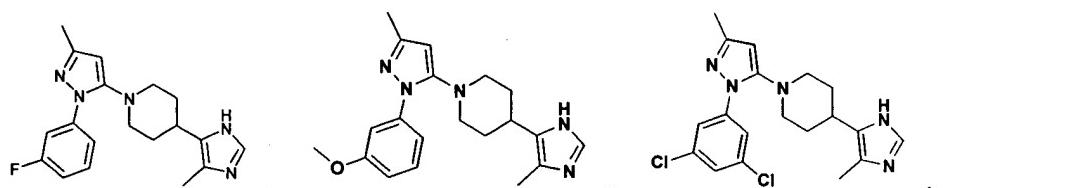
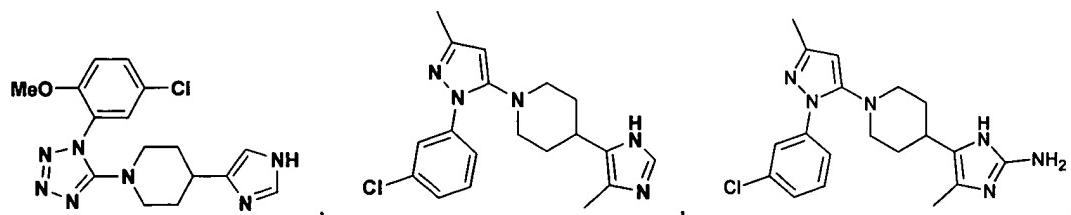


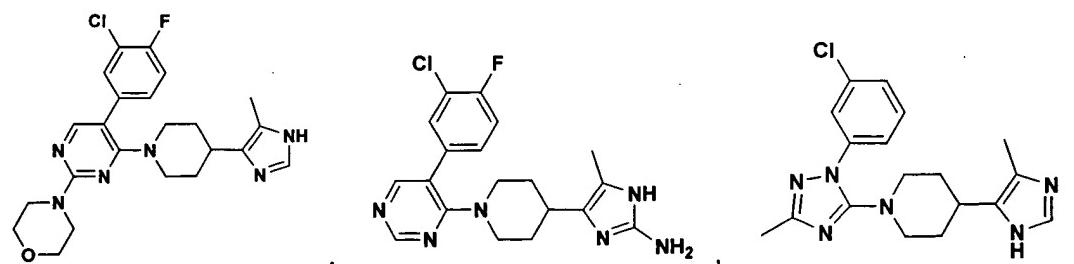
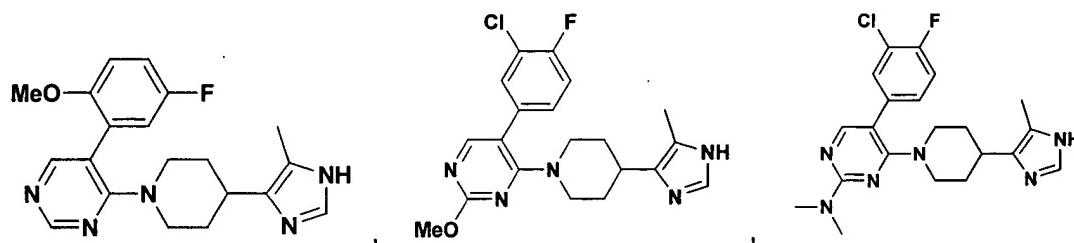
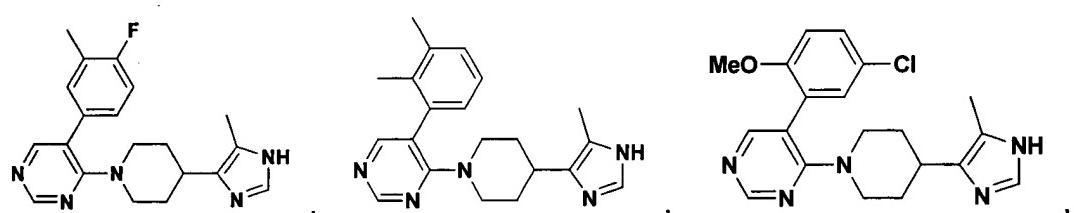
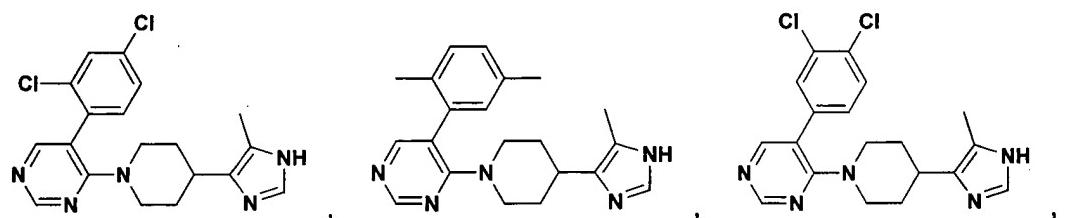
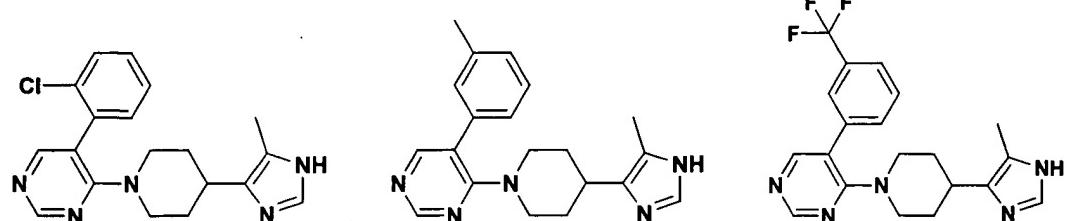
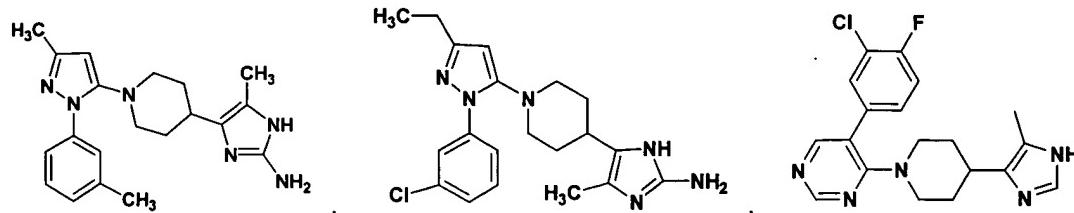


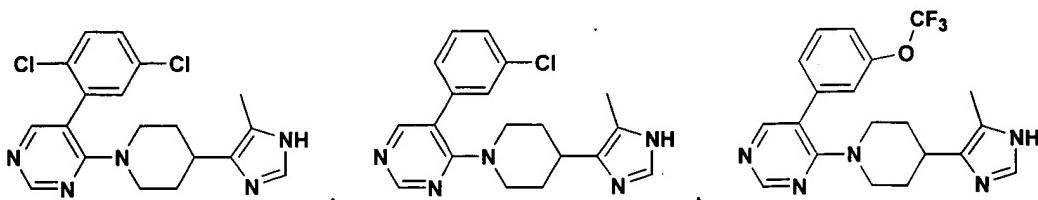
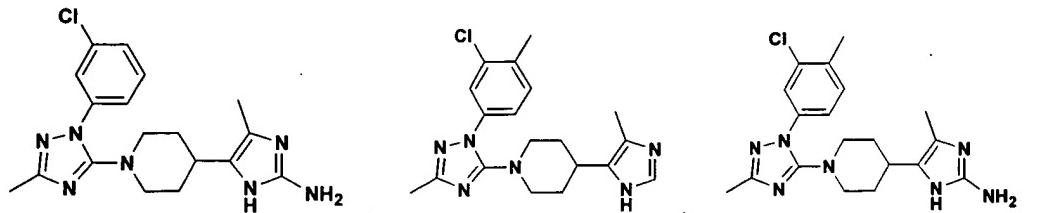


Claim 29. (Previously Presented) A compound having the structure

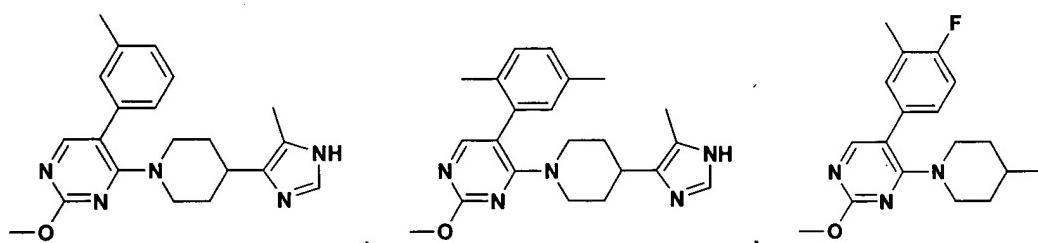
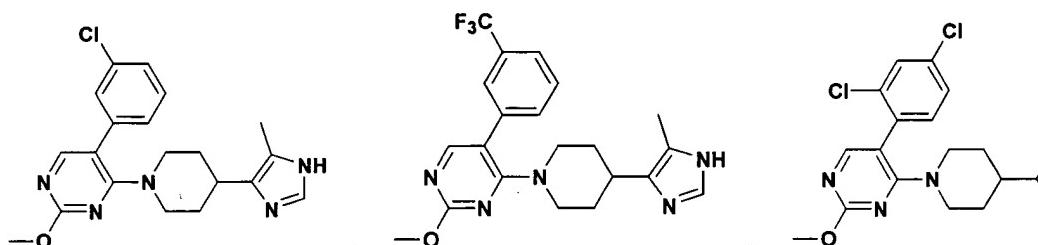




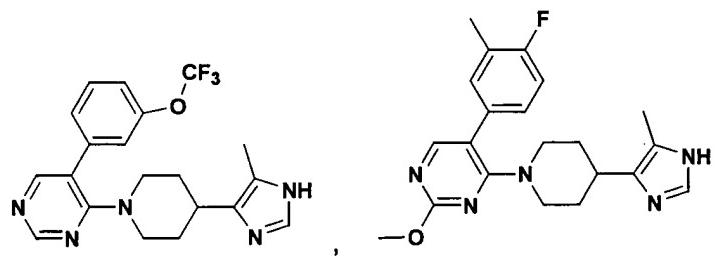
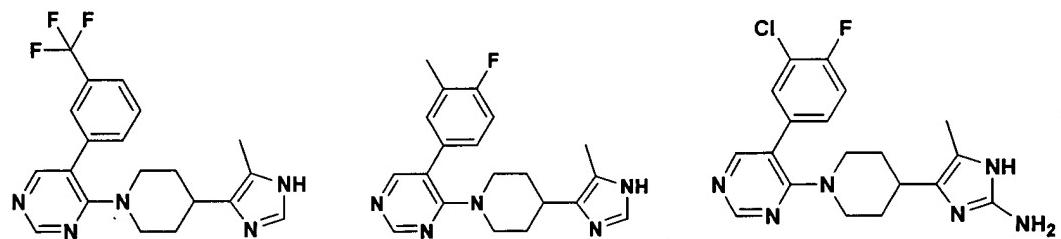
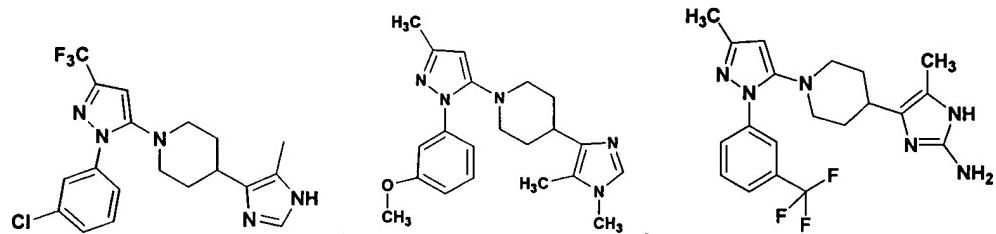
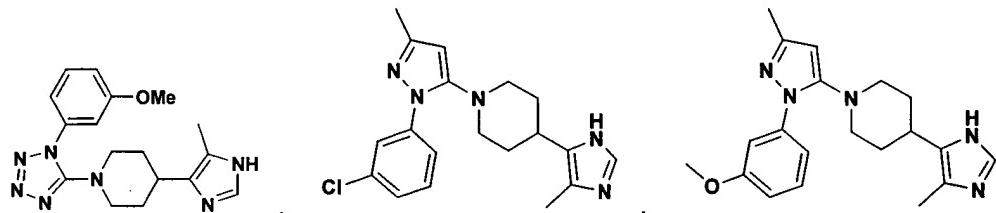
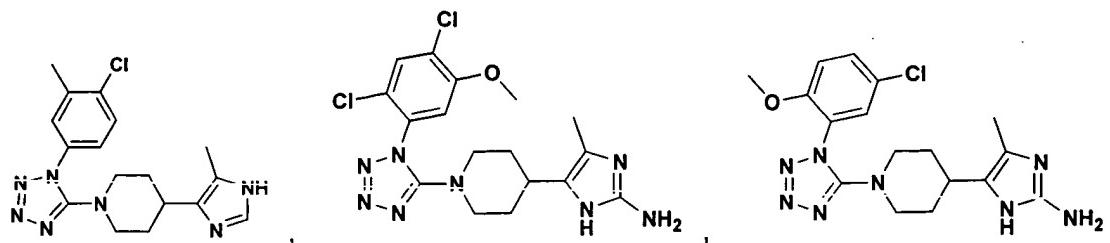




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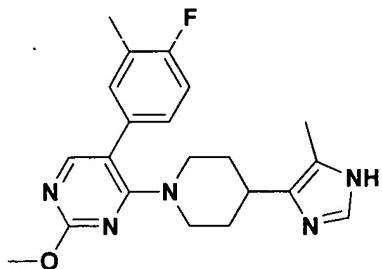
Claim 30. (Previously Presented) A compound having the structure



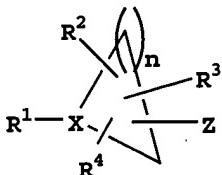
Claim 31. (Original) A pharmaceutical composition comprising a compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.

Claims 32-62. (Cancelled).

Claim 63. (Previously Presented) A compound having the following structure



Claim 64. (Currently Amended) A compound having the structure



wherein n is 4;

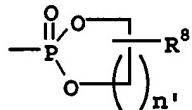
X is N;

Z is a 5- or 6-membered nitrogen-containing monocycle heteroaryl group which is selected from the group consisting of imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, benzimidazole, aminothiazole, aminoxazole, aminoxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxy carbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine;

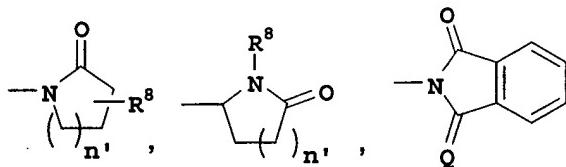
R<sup>1</sup> is tetrazolyl, pyrazolyl, thiazolyl, pyrimidinyl, oxazole, or triazole; and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents;

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl,

polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxy carbonylamino, I,I-(alkoxyl or aryloxy)<sub>2</sub>alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,



pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

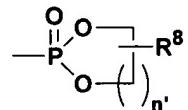
including or a pharmaceutically acceptable salt thereof, prodrugs or a prodrug thereof, and all stereoisomers thereof.

Claim 65. (Currently Amended) The compound as defined in Claim 64 wherein Z is imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino-

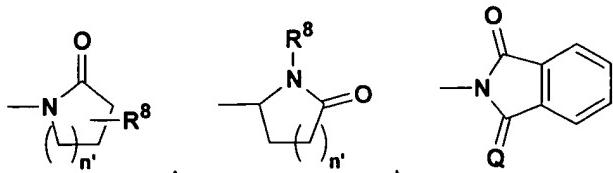
(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, benzimidazole, benzimidazole, aminothiazole, aminoazazole, aminoazadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxy carbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine.

Claim 66. (Currently Amended) The compound as defined in Claim 1 wherein the R<sup>1</sup> group may be substituted within from one to five of the following groups:

alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroaryl amine, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl such as CF<sub>3</sub> and CF<sub>3</sub>CH<sub>2</sub>, polyhaloalkyloxy such as CF<sub>3</sub>O and CF<sub>3</sub>CH<sub>2</sub>O, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxy carbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, 1,1-(alkoxyl or aryloxy)<sub>2</sub>alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring, such as 1,3-dioxane or 1,3-dioxolane), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl,



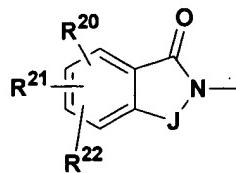
NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl,  
NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino, pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0,1,2 or 3) or  $\text{NR}^8\text{R}$   $\text{O}$   
 $\text{---C=CH---C---R}^{8a}$ ; tetrazolyl, pyrazolyl, pyridyl pyridyl,  
thiazolyl, pyrimidinyl, imidazole, oxazole or triazole; -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are  
independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy,  
heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or  
cycloheteroalkylalkoxy);

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl,  
arylalkyl, cycloalkyl, (cycloalkyl)alkyl or cycloheteroalkyl, which substituents may be the same or  
different from each other and may be the same or different from the base R<sup>1</sup> group.

Claim 67. (Previously Presented) The compound as defined in Claim 64 wherein R<sup>1</sup> is  
substituted with one to five of the following substituents: alkyl, alkylaminocarbonyl,  
arylaminocarbonyl, heteroarylaminocarbonyl, alkylcarbonylamino, heteroaryl, halo, aryl,  
cycloalkylcarbonylamino, arylcarbonylamino, heteroarylcarbonylamino, alkoxy carbonylamino,  
guanidinyl, nitro, cycloheteroalkyl, aryloxycarbonylamino, heteroaryloxy carbonylamino, uriedo  
(where the uriedo nitrogens may be substituted with alkyl, aryl or heteroaryl),  
heterocyclcarbonylamino (where the heterocycle is connected to the carbonyl group via a nitrogen  
or carbon atom), alkylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino,



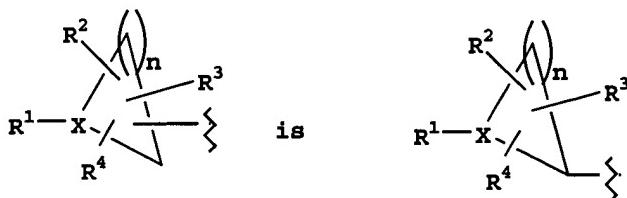
Where J is:  $\text{CHR}^{23}$ ,  $\text{---C---}$ ,  $\text{---CH---CH---}$  or  $\text{---C=C---}$ ;

R<sup>23</sup>, R<sup>24</sup> and R<sup>25</sup> are independently hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl,  
heteroarylalkyl, cycloalkyl, or cycloalkylalkyl;

$R^{20}$ ,  $R^{21}$ ,  $R^{22}$  are independently hydrogen, halo, alkyl, alkenyl, alkoxy, aryloxy, aryl, arylalkyl, alkylmercapto, arylmercapto, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, hydroxy or haloalkyl; and these preferred substituents may either be directly attached to  $R^1$ , or attached via an alkylene chain at an open position, which substituents may be the same or different from each other, and may be the same or different from the base  $R^1$  group.

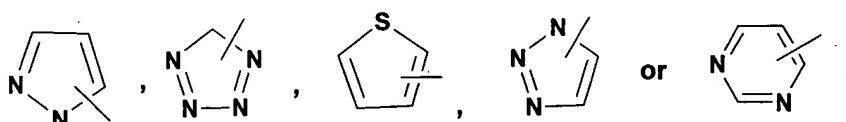
Claim 68. (Previously Presented) The compound as defined in Claim 64 wherein Z is imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino(alkyl)imidazole or (acetylamino)imidazole.

Claim 69. (Previously Presented) The compound as defined in Claim 64 wherein the moiety



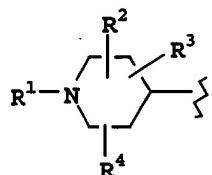
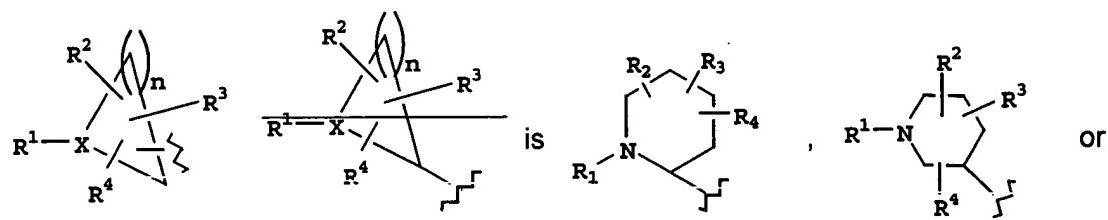
Claim 70. (Previously Presented) The compound as defined in Claim 64 wherein  $R^2$  and  $R^3$  are independently H, lower alkoxy or aryl, and  $R^4$  and  $R^5$  are each hydrogen.

Claim 71. (Previously Presented) The compound as defined in Claim 64 wherein  $R^1$  is

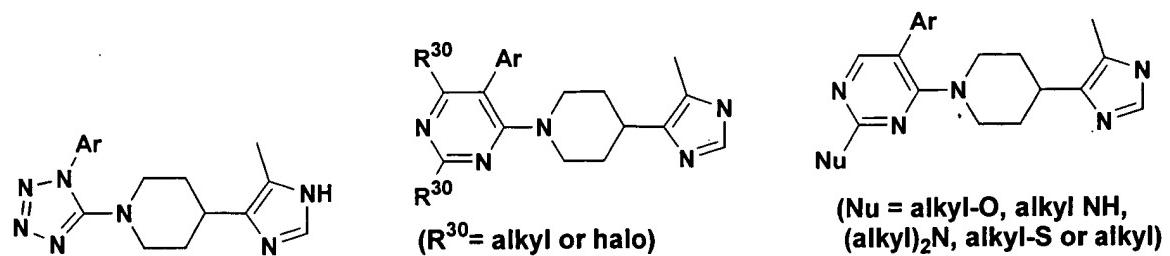
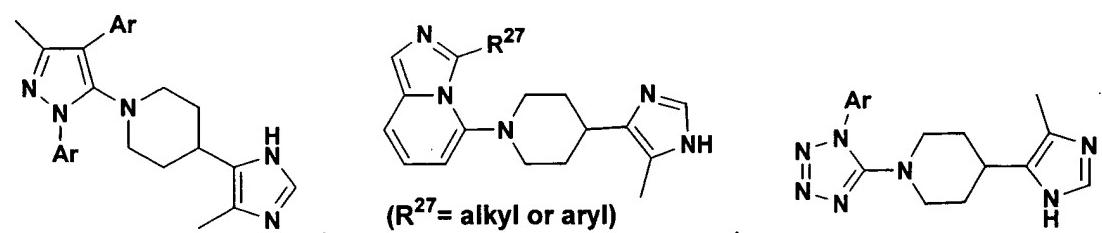
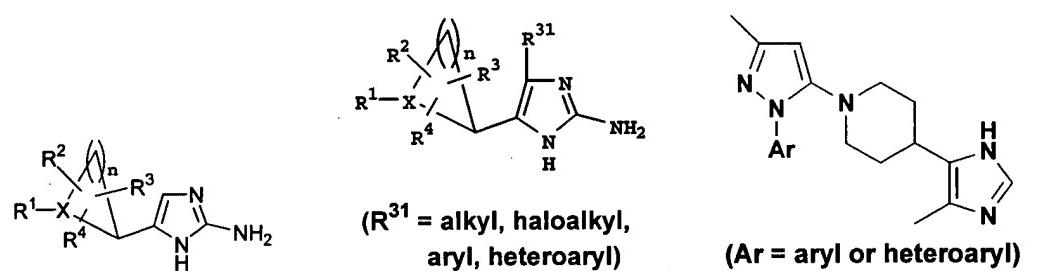


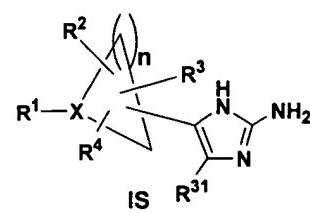
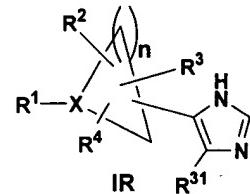
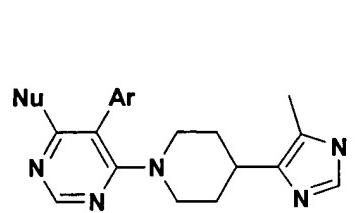
Claim 72. (Previously Presented) The compound as defined in Claim 64 wherein  $R^1$ ,  $R^2$ ,  $R^3$  and/or  $R^4$  may be joined together with the N atom and/or carbons to which they are attached to form a non-aromatic ring.

Claim 73. (Currently Amended) The compound as defined in Claim 64 wherein

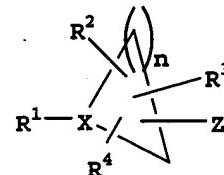


Claim 74. (Previously Presented) The compound as defined in Claim 64 having the structure





Claim 75. (New) A compound having the structure



wherein *n* is 4;

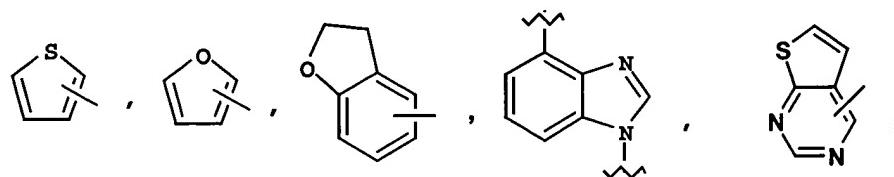
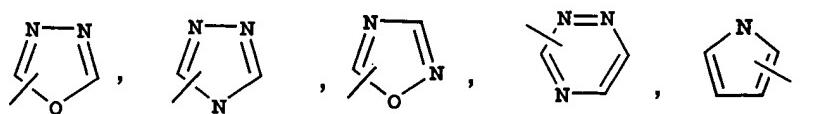
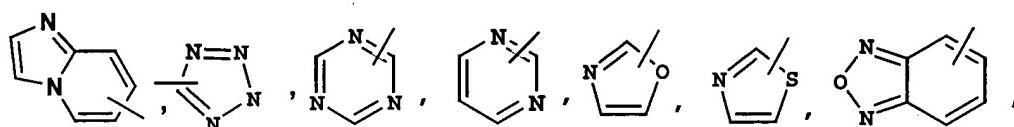
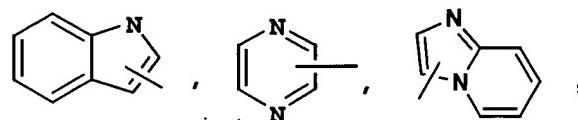
*X* is N;

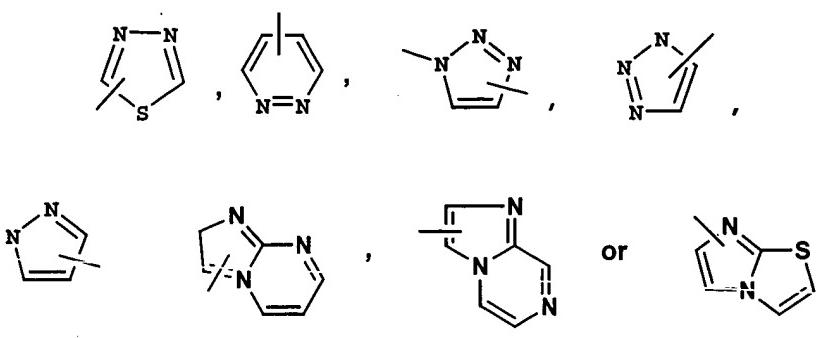
*Z* is a 5- or 6-membered nitrogen-containing monocyclic heteroaryl group;

*R*<sup>1</sup> is heteroaryl,

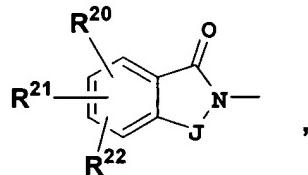
and *R*<sup>1</sup> is substituted with from one to five substituents;

and wherein the *R*<sup>1</sup> heteroaryl group is selected from





wherein the R<sup>1</sup> heteroaryl group is substituted with one to five of the following substituents: alkyl, alkylaminocarbonyl, arylaminocarbonyl, heteroarylamino, alkylcarbonylamino, heteroaryl, halo, aryl, cycloalkylcarbonylamino, arylcarbonylamino, heteroarylcarbonylamino, alkoxycarbonylamino, guanidinyl, nitro, cycloheteroalkyl, aryloxycarbonylamino, heteroaryloxy carbonylamino, uriedo (where the uriedo nitrogens may be substituted with alkyl, aryl or heteroaryl), heterocyclcarbonylamino (where the heterocycle is connected to the carbonyl group via a nitrogen or carbon atom), alkylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino,



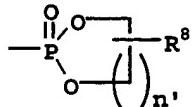
where J is: CHR<sup>23</sup>, —C(=O)—, —CH—CH— or —C=C—;

R<sup>23</sup>, R<sup>24</sup> and R<sup>25</sup> are independently hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, cycloalkyl, or cycloalkylalkyl;

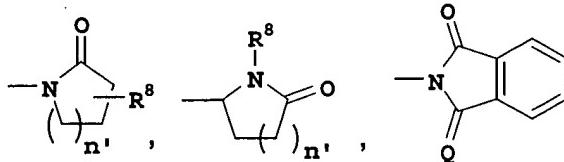
R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup> are independently hydrogen, halo, alkyl, alkenyl, alkoxy, aryloxy, aryl, arylalkyl, alkylmercapto, arylmercapto, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, hydroxy or haloalkyl; and these substituents may either be directly attached to R<sup>1</sup>, or attached via an alkylene chain at an open position, which substituents may be the same or different from each other and may be the same or different from the base R<sup>1</sup> group;

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyoxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl,

heteroarylarnino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylarnino, alkenylsulfonylarnino, alkynylsulfonylarnino, arylsulfonylarnino, heteroarylsulfonylarnino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylcarbonyloxy, alkylcarbonylarnino, arylcarbonyl, arylcarbonyloxy, arylcarbonylarnino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylarnino, cyano, nitro, alkenylcarbonylarnino, alkynylcarbonylarnino, alkylaminocarbonylarnino, alkenylaminocarbonylarnino, alkynylaminocarbonylarnino, arylaminocarbonylarnino, heteroarylaminocarbonylarnino, alkoxycarbonylarnino, alkenyloxycarbonylarnino, alkynyloxycarbonylarnino, aryloxycarbonylarnino, heteroaryloxycarbonylarnino, aminocarbonylarnino, alkylaminocarbonyloxy, alkoxycarbonylarnino, I,I-(alkoxyl or aryloxy)<sub>2</sub>alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,



pyridine-N-oxide,



(where Q is O or H<sub>2</sub> and n' is 0, 1, 2 or 3) or

tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl; or a pharmaceutically acceptable salt thereof, or a prodrug thereof, and all stereoisomers thereof.

Claim 76. (New) The compound as defined in Claim 75 wherein

(1)

